NOT FOR PUBLICATION

UNITED STATES DISTRICT COURT DISTRICT OF NEW JERSEY

NITE GLOW INDUSTRIES, INC., I DID IT, INC., and MARNI MARKELL HURWITZ,

Plaintiffs,

v.

CENTRAL GARDEN & PET COMPANY and FOUR PAWS PET COMPANY, d/b/a FOUR PAWS PRODUCTS, LTD.,

Defendants.

Civil No.: 12-4047 (KSH) (CLW)

OPINION

Katharine S. Hayden, U.S.D.J.

I. Introduction & Procedural History

This matter requires the Court to construe ten terms pertaining to a patent for a device that applies flea and tick medication to animals. The device was invented by plaintiff Marni Markell Hurwitz, who assigned her rights in the patent to plaintiff I Did It, Inc. ("I Did It"), which is doing business as Nite Glow Industries, Inc. ("Nite Glow") (collectively, "plaintiffs"). (D.E. 50 ("Compl") ¶¶ 1-2.) Hurwitz wholly owns I Did It/Nite Glow. (Compl. ¶ 3.) Plaintiffs assert, among other things, that the patent-in-suit has been and continues to be infringed by defendants, Four Paws Product, Ltd. ("Four Paws Product"), which is doing business as Four Paws Pet Company ("Four Paws Pet Co.") (together, "Four Paws"). (Compl. ¶ 4.) Four Paws is a subsidiary of Central Garden & Pet Company ("Central Garden") (collectively, "defendants"). (Compl. ¶ 5.)

The parties filed their opening *Markman* briefs on May 1, 2015. (D.E. 74, 70.) Plaintiffs' brief was later amended on August 3, 2015. (D.E. 83.) Each side filed responsive briefs on October 30, 2015, and plaintiffs requested a claim construction hearing. (D.E. 116, 119, 124.) Plaintiffs then filed a motion to amend/correct the patent, which was argued at the claim construction hearing held on February 8, 2016.

II. Factual Background

The patent at issue (the "'445 Patent") was issued to Hurwitz by the United States Patent and Trademark Office ("USPTO") on November 15, 2011, for "Direct Delivery Applicator Assembly and Method of Use." (Compl. ¶17-18, Ex. A ("'445 Patent").) The '445 Patent has one independent claim and 18 dependent claims. ('445 Patent, Column 9-10.) The independent claim contains the majority of the terms that the parties have asked the Court to construe, each identified below in bold and underlined:

A <u>direct delivery applicator</u> for delivering a solution to an animal's skin, comprising:

- a. an <u>applicator base</u> having a chamber comprising a top surface with a first opening and bottom surface traversing into a <u>canal</u>, said chamber being appointed to receive a cartridge having a cartridge aperture and a solution compartment housing a solution, said cartridge being appointed to be received within said first opening and removably housed within said chamber of said applicator base;
- b. an <u>applicator head</u> having an applicator orifice and being **aligned** with said canal of said chamber;
- c. at least one **prong member** having an internal channel therein with a **delivery aperture** being associated and aligned with said applicator head, said cartridge aperture of said cartridge appointed to be aligned with said applicator orifice of said applicator head for delivery of said solution through said delivery aperture of said internal channel of said prong member onto said animal's coat;
- d. said chamber of said applicator base being composed of a <u>flexible deformable material</u> so that said chamber can be squeezed to apply enhanced pressure on said solution compartment of said cartridge to facilitate release of said solution from said cartridge and through said **prongs**; and

e. said flexible deformable material being composed of <u>rubber</u> having a thickness in the range of 1/32 inch to 3/32 inch; wherein pressing on said solution compartment of said cartridge causes said solution to travel through said internal channel of said prong and onto said animal's skin.

('445 Patent, Column 9, lines 16-46.) Dependent claim 16 contains the final term for construction:

16. A direct delivery applicator as recited by claim 1 being composed of a light weight **polymeric material**.

('445 Patent, Column 10, lines 39-40.)

During the patent's prosecution, Hurwitz amended claim 1 in response to an Office Action dated February 2, 2011. The amendment moved two dependent claims, both of which were dependent on claim 1 in the initial application, and incorporated them as subparagraphs d and e of independent claim 1. (D.E. 138 at 7, Ex. B; D.E. 139 at 8, Ex. F.) The amended application explained that, in response to the examiner's objection to initial claim 4, the

applicant has amended claim 1 to require (i) that the chamber of the applicator base is composed of a flexible deformable material so that the chamber can be squeezed to apply enhanced pressure on the solution compartment of the cartridge to facilitate release of the solution from the cartridge and through the prongs; and (ii) the flexible deformable material is composed of rubber having a thickness in the range of 1/32 inch to 3/32 inch. These features correspond to the restrictions of original claims 3 and 4, which have now been incorporated into claim 1.

(D.E. 138-3, Ex. B at 12; D.E. 139-7, Ex. F at 11.) The above language is also contained at the beginning of the remarks filed in the amended application on April 17, 2011. (D.E. 138-3, Ex. B at 9; D.E. 139-7, Ex. F at 8.) The remarks go on to explain the invention as follows:

The present invention provides an easy-to-use applicator that delivers one or more active ingredients, such as flea, tick or insect repellant directly to an animal's skin, local to the roots of hair/fur. The direct delivery applicator is appointed to removably receive a cartridge or solution packet therein for accurate and clean delivery

onto the animal's skin and interstices of the hair/fur. At least one prong member having an internal channel and prong/delivery aperture is constructed within the direct delivery applicator. The prong is constructed having an appropriate length so that the prong's delivery aperture substantially contacts the animal's skin beneath the fur. With this construction, the active ingredients are directly delivered onto the animal's skin affording a clean application and accurate dispersion of the medicament or active ingredients onto the animal.

(D.E. 138-3, Ex. B at 9; D.E. 139-7, Ex. F at 8.)

III. Legal Standards

a. Claim Construction

"[T]he construction of a patent, including terms of art within its claim, is exclusively within the province of the court." *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 372 (1996). To interpret a claim, the Court first looks to "intrinsic evidence of record, *i.e.*, the patent itself, including the claims, the specification and, if in evidence, the prosecution history. Such intrinsic evidence is the most significant source of the legally operative meaning of disputed claim language." *Vitronics Corp. v. Conceptronics, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (internal citation omitted).

Thus, "[c]laim construction begins with the language of the claims themselves."

Imaginal Systematic, LLC v. Leggett & Platt, Inc., 805 F.3d 1102, 1108 (Fed. Cir. 2015) (citing Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1116 (Fed. Cir. 2004)). Words of a claim should be given their customary meaning—that is, "the meaning that the term would have to a person of ordinary skill in the art at the time of the invention." Id. (citing Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc)). However, claims do not stand alone, and a court must read the claims "in view of the specification, of which they are a part." Phillips, 415 F.3d at 1315. The specification "is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the

meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996). However, a court should "avoid importing limitations from the specification into the claims." *Phillips*, 415 F.3d at 1323. Under the doctrine of claim differentiation, a court should also endeavor not to read a limitation from a dependent claim into an independent claim. *Summit* 6, *LLC v. Samsung Electronics Co., Ltd.*, 802 F.3d 1283, 1290 (Fed. Cir. 2015). A court may also look to the patent prosecution history to help understand claim language that is ambiguous, but the history may not "enlarge, diminish, or vary' the limitations in the claims." *Markman*, 52 F.3d at 980 (quoting *Goodyear Dental Vulcanite Co. v. Darvis*, 102 U.S. 222, 227 (1880)).

"Although courts are permitted to consider extrinsic evidence, like expert testimony, dictionaries, and treatises, such evidence is generally of less significance than the intrinsic record." *Summit 6, LLC*, 802 F.3d at 1290 (citing *Phillips*, 415 F.3d at 1317). "Undue reliance on external evidence poses the risk that it will be used to change the meaning of claims in derogation of the [public record of intrinsic evidence], thereby undermining the public notice function of patents." *Phillips*, 415 F.3d at 1319. Accordingly, courts should only rely on extrinsic evidence "when the claim language remains genuinely ambiguous after consideration of the intrinsic evidence." *Interactive Gift Exp., Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1332 (Fed. Cir. 2001). "Extrinsic evidence may not be used 'to contradict claim meaning that is unambiguous in light of the intrinsic evidence." *Summit 6, LLC*, 802 F.3d at 1290 (quoting *Phillips*, 415 F.3d at 1317).

In summary, the Court must first look to the language of the claim itself and determine the terms' meaning as they would be understood by one of ordinary skill in the art. *Phillips*, 415 F.3d at 1312-13. The Court must also look to the specification and prosecution history. *Id.* at

1315, 1317. If the terms are still ambiguous, the Court may consult extrinsic evidence such as dictionaries or expert testimony. *Id.* at 1317-18.

b. Amending/Correcting a Patent

When the USPTO makes an error in a patent that is clearly disclosed by USPTO records, "the Director may issue a certificate of correction stating the fact and nature of such mistake, under seal, without charge, to be recorded in the record of patents." 35 U.S.C. § 254. Such a certificate of correction may also be issued by the USPTO where a clerical, typographical, or minor mistake has been made, even without fault by the USPTO, provided "the correction does not involve such changes in the patent as would constitute a new matter or would require reexamination." 35 U.S.C. § 255.

Absent action by the USPTO, "'[a] district court may correct a patent only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest different interpretation of claims." *CBT Flint Partners, LLC v. Return Path, Inc.*, 654 F.3d 1353, 1358 (Fed. Cir. 2011) (quoting *Novo Indus. L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1357 (Fed. Cir. 2003)). "A district court can correct a patent only if, among other things, 'the error is evident from the face of the patent." *H-W Tech., L.C. v. Overstock.com, Inc.*, 758 F.3d 1329, 1333 (Fed. Cir. 2014) (quoting *Grp. One, Ltd. v. Hallmark Cards, Inc.*, 407 F.3d 1297, 1303 (Fed. Cir. 2005)). "In deciding whether it ha[s] authority to correct a claim, a district court must consider any proposed correction 'from the point of view of one skilled in the art." *CBT Flint Partners*, 654 F.3d at 1358 (quoting *Ultimax Cement Mfg. Corp. v. CTS Cement Mfg. Corp.*, 587 F.3d 1339, 1353 (Fed. Cir. 2009)).

For example, in Novo Industries, the patent for vertical blinds included a claim for

[a] carrier assembly for movably supporting one of a plurality of vertical oriented slats in a vertical blind assembly, said carrier assembly comprising: ...g) stop means formed on $\underline{\mathbf{a}}$ rotatable with said support finger and extending outwardly therefrom into engaging relation with one of two spaced apart stop members formed on said frame.

350 F.3d at 1351-52 (emphasis added). The plaintiff suggested two ways to correct this portion of the patent, and the defendant suggested a third option. *Id.* at 1352. The district court rejected the parties' suggestions and amended the claim to replace "a" with "and," so it read "stop means formed on **and** rotatable with said support finger." *Id.* at 1353. (emphasis added). The Federal Circuit reversed after concluding that the error was "not apparent from the face of the patent," and that the prosecution history did not support the district court's modification. *Id.* at 1357-58. As the amendment required guesswork as to what was intended by the patentee, the district court was without authority to correct the patent. *Id.* at 1358.

In contrast, a district court did have authority to add a comma between the symbols for fluorine and chlorine because "one of ordinary skill in the art would know that the formula should contain a comma." *Ultimax Cement Mfg.*, 587 F.3d at 1353. Additionally, in *CBT Flint Partners*, *LLC*, the Federal Circuit concluded that a district court did have authority to correct "a 'drafting error' where the claim recite[d] 'the computer being programmed to detect analyze the electronic mail communication." 654 F.3d at 1356, 1358-59. The district court should have inserted the word "and" between "detect" and "analyze," and erred by relying too heavily on one portion of testimony by a co-inventor stating that "he was not sure what he meant by the claim language 'detect analyze" to find reasonable debate about the claim's meaning. *Id.* at 1360.

Thus, there are limited circumstances where it is appropriate for a district court to amend or correct the language of a patent. *See CBT Flint Partners, LLC*, 654 F.3d at 1358; *H-W Tech.*, *L.C.*, 758 F.3d at 1333.

IV. Discussion

The Court first addresses the motion to correct or amend the patent, in which plaintiffs seek to modify "said prongs" to "said prong" in subsection d of claim 1. They argue that the inclusion of the letter "s" on "said prongs" was a typographical error that this Court has the authority to correct. Plaintiffs identify that a version of "prong" or "prong member" can be found four times in claim 1; they assert that three of these occurrences are singular, including the first occurrence to which each subsequent occurrence refers by use of the word "said" preceding "prong" or "prong member." The only plural occurrence is the one they ask this Court to amend. Plaintiffs also point to remarks in the prosecution history when the singular version of prong is used.

In opposing, defendants argue that the proposed change would expand the claim to cover a single prong, which is not clear from the face of the patent or the prosecution history. Further, they contend that there is reasonable debate as to the construction of the term based on the claim language and the specifications, in which the plural "prongs" is used. Defendants also point to the figures included in the '445 Patent and the inventor's notebook to show that the invention involves a multitude of prongs.

The Court finds that it is without authority to amend the '445 Patent. *CBT Flint Partners*, *LLC*, 654 F.3d at 1358 ("A district court may correct a patent only if (1) the correction is not subject to reasonable debate based on consideration of the claim language and the specification and (2) the prosecution history does not suggest different interpretation of claims." (internal quotation marks omitted)). This is not a clear case where a typographical error was made and the surrounding language makes clear that the singular rather than the plural version of the noun was intended. Rather, the '445 Patent is replete with plural and singular versions of the term "prong." This back and forth can be found in the claims themselves and the specifications. (*See*,

e.g., '445 Patent, Column 1, line 10 (plural); Column 2, line 25 (plural); Column 2, line 43 (either); Column 2, line 44, 45 (singular); Column 2, line 59 (either); Column 2, line 61 (singular).) Further, the initial use of the term, "at least one prong member," contains the potential for singular and for plural. So the fact that "said" is used to harken back to this first occurrence is not dispositive. Given the above, it is not clear even from the point of view of one skilled in the art, that there is an error "evident on the face of the patent." H-W Tech., L.C., 758 F.3d at 1333 (quoting Grp. One, Ltd., 407 F.3d at 1303).

Further, the prosecution history does not clarify the matter or clearly support plaintiffs' argument. *Novo Indus. L.P.*, 350 F.3d at 1357. The remarks included in the amendment to the USPTO contain both plural and singular uses of the term "prong"/"prongs." (*Compare* D.E. 138-3, Ex. B at 12; D.E. 139-7, Ex. F at 11 (plural), *with* D.E. 138-3, Ex. B at 9; D.E. 139-7, Ex. F at 8 (singular).) More importantly, a review of the full remarks regarding the proposed amendment to the '445 Patent does not clearly indicate that this is a single-pronged invention, covered by a patent where there were typographical errors throughout the document.

Accordingly, plaintiffs' motion to correct or amend the patent is denied. The Court now turns to each of the disputed claim terms.¹

a. 'direct delivery applicator'

Plaintiffs argue that the Court need not construe "direct delivery applicator" because it is merely the name of the apparatus and contained in the preamble of the claims rather than the body; therefore it should not be given patentable weight. However, if the Court does construe

¹ There are several terms that were identified as disputed in early discussions among the parties, but which were not addressed at the *Markman* hearing because plaintiffs confirmed that they have abandoned any assertion of infringement of claims 2, 6-9, 13-16, 17, and 18. (February 8, 2016 *Markman* Hearing Transcript at 19:13 – 20:9.) Thus, the previously disputed terms that are found only in those claims—"flap," "angled tip," and "elongated cylindrical shape"—need not be construed and were not argued at the *Markman* hearing.

the term, plaintiffs assert that its ordinary meaning is, as stated in the preamble, an applicator for delivering something directly – here, solution to an animal's skin. Defendants argue that the Court should adopt a definition that incorporates all of the necessary features and elements of the invention, each of which is subject to its own interpretation. Defendants' proposed construction includes all elements in the sole independent claim as defendants have defined them:

a device comprised of a chamber made of rubber, an applicator base, an applicator head, an internal channel, and at least three prongs, wherein such prongs must be in contact with the animal's skin as solution is pushed from a removable cartridge through the internal channels of the prongs, by exerting pressure on the rubber, and secreted through the prongs directly onto said skin.

Because the term "direct delivery applicator" is found solely in the preamble of claim 1 and the body of the claim sets forth the complete invention in subparagraphs a through e, the Court declines to construe this term. *See Intell-A-Check Corp. v. Autoscribe Corp.*, 346 F. Supp.2d 698, 704 (D.N.J. 2004) (Martini, J.) (citing *Altiris, Inc. v. Symantec Corp.*, 318 F.3d 1363, 1371 (Fed. Cir. 2003) ("Terms found solely in the preamble are not to be construed if the body of the claim sets forth the complete invention.")). Assigning a definition to this term is not only unnecessary, but also has the potential to create a conflict with the remaining terms at issue—all of which work together as part of the claim to describe the device. The preamble here "is not necessary to give life, meaning and vitality to the claim." *Schumer v. Lab Comp. Sys.*, *Inc.*, 308 F.3d 1304, 1310 (Fed. Cir. 2002). Thus, the Court finds defendants' requested definition unnecessary and declines to construe this term.

b. "applicator base"

The '445 Patent claims "an applicator base having a chamber comprising a top surface with a first opening and bottom surface traversing into a canal[.]" Plaintiffs propose that the term "applicator base" be defined as "a body having a chamber that receives a cartridge or

solution packet" and argue that their construction aligns with the claim language. Defendants advocate that the term should be defined as "the bottom portion of the chamber made of flexible deformable material" and argue that subsection d of claim 1 specifically claims that the chamber of the applicator base is composed of a flexible deformable material; therefore, any construction of the chamber of the "applicator base" should take this limitation as to the composition material into account. Defendants point to the prosecution history for further support and argue that the Court should adopt this construction to prevent plaintiffs from arguing that the chamber of the applicator base could be composed of any other material. Plaintiffs respond that the amendment to the patent application merely added the requirement that the chamber of the applicator base be made of flexible deformable material, not the applicator base itself. They assert that, if flexible deformable material was actually part of the definition of the term "applicator base," then it would have been unnecessary to amend original claim 1 to add this limitation.

These arguments highlight the theme of each side's proposed constructions. Generally, plaintiffs seek constructions that are more minimalistic, while defendants' proposed constructions seek to incorporate the purpose and function of the particular term in the context of the broader device, and therefore frequently include several limitations. While these positions are undoubtedly linked to the parties' respective strengths and weaknesses with respect to the underlying patent infringement claim, a district court is not permitted to construe claims with reference to the accused device and ultimate infringement determination. *See Wilson Sporting Goods Co. v. Hillerich & Bradsby Co.*, 442 F.3d 1322, 1330-31 (2006). Understanding that claim terms cannot be construed in isolation, the Court still must construe them "in light of the specification and prosecution and prosecution history," which "only compel departure from the

plain meaning in two instances: lexicography and disavowal," neither of which is present here.² *G.E. Lighting Solutions, LLC*, 750 F.3d at 1308-09 (citing *Phillips*, 415 F.3d at 1313; *Thorner v. Sony Computer Entm't Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012)).

Most relevant on this point, when the ordinary and customary meaning to one skilled in the art is being determined, "the claims themselves provide substantial guidance as to the meaning of particular claim terms." *Phillips*, 415 F.3d at 1314. For example, in *Phillips* the Federal Circuit explained that the claim "refers to 'steel baffles,' which strongly implies that the term 'baffles' does not inherently mean objects made of steel." *Id.* This example highlights that reading a disputed term in the context of the surrounding words of the claim does not necessarily mean incorporating all of the concepts in the claim—to do so would make the other terms in the claim duplicative. *See id.*; *Safety Rail Source, LLC v. Bilco Co.*, 656 F. Supp.2d 468, 479-80 (D.N.J. 2009) (Simandle, C.J.) (rejecting proposed construction that rendered claim language redundant); *JVI, Inc. v. Truckform Inc.*, 2012 WL 6708169 at *15 (D.N.J. Dec. 26, 2012) (Wolfson, J.) (same).

Applying these principles here, the Court rejects defendants' inclusion of "flexible deformable material" in the definition of "applicator base" because subsection d of claim 1 already provides that "said chamber of said applicator base being composed of a flexible deformable material." The claim is clear that the "chamber" portion of the "applicator base" is made of flexible deformable material, and it is not necessary to repeat this in the definition of "applicator base." Plaintiff's proposed construction of "a body having a chamber that receives a cartridge or solution packet" is more in line with the plain and ordinary meaning of applicator

² For lexicography, "a patentee must clearly set forth a definition of the disputed claim term, and clearly express an intent to define the term. Similarly, disavowal requires that the specification or prosecution history makes clear that the invention does not include a particular feature." *G.E. Lighting Solutions, LLC v. AgiLight, Inc.*, 750 F.3d 1304, 1309 (Fed. Cir. 2014) (internal citations and quotation marks omitted).

base as it would be understood by a person of ordinary skill in the art. Further, the claim language indicates that the applicator base has a chamber and is not the bottom portion of a chamber. This more closely aligns with the construction proposed by plaintiffs, which the Court adopts.

c. "canal"

Plaintiffs argue that because the term "canal" was not explicitly defined in the claim language or specification, the Court should look to external evidence to discern its ordinary meaning. They propose the definition: "a tube, duct, passageway or a narrowing." Defendants propose the definition: "a channel which begins in the chamber of the applicator, continues through the applicator head, ends at the prongs, and secures the solution-bearing cartridge to permit travel of the solution from the cartridge to the prongs." They argue that their construction is more appropriate because it takes into account the functionalities and purposes of the invention and canal.

The claim language itself does not provide much guidance on the meaning of the term "canal." Claim 1, subsection a claims "an applicator base having a chamber comprising a top surface with a first opening and bottom surface traversing a canal," and subsection b. claims "an applicator head having an applicator orifice and being aligned with said canal of said chamber." The Court finds plaintiffs' definition to be clearer and more consistent with the ordinary definition of the term "canal." Defendants' proposed definition includes additional concepts that are all found in the claim language and need not be duplicated in the definition of "canal." *See Phillips*, 415 F.3d at 1314; *Safety Rail Source*, 656 F. Supp.2d at 479-80; *JVI, Inc.*, 2012 WL 6708169 at *15. However, the Court modifies plaintiffs' proposed construction to incorporate

concessions made at oral argument and construes "canal" to mean a passageway or channel. (February 8, 2016 *Markman* Hearing Transcript at 48:19-25.)

d. "applicator head"

Plaintiffs assert that the ordinary meaning of "applicator head" is "the head/front or forward section of the direct delivery applicator." They argue that the construction proposed by Defendants—"a hollow portion of the applicator that is narrower than, and protrudes from, the chamber and contains a canal which secures the solution-bearing cartridge to permit travel of the solution from the cartridge to the prongs"—once again adds extraneous limitations not included in any ordinary dictionary meaning for the term head. Defendants contend that the claims, figures, and specifications make plain that the applicator head is a narrower, hollow portion of the applicator that protrudes from the chamber and that contains the canal used to secure the cartridge during use.

Defendants seek to incorporate the purpose of the applicator head into its construction, unnecessarily complicating the term with concepts that are contained elsewhere in the claim and therefore unlikely to be part of the ordinary meaning of "applicator head." *See Phillips*, 415 F.3d at 1314; *Safety Rail Source*, 656 F. Supp.2d at 479-80; *JVI, Inc.*, 2012 WL 6708169 at *15. The remainder of the claim makes clear how the components fit together and work; reading the claim directly is a more appropriate means of discerning the purpose of the tool than trying to incorporate large portions of the claim into the definition of this small and simple term. The Court determines that "applicator head" as used in the '445 Patent is the front or forward section of the device.

e. "aligned"

Plaintiffs submit that, because the term "aligned" was not explicitly defined in the specification or claim, it must be given its ordinary meaning of "in line with regarding position or orientation." Defendants propose that the term "aligned" be construed as "lined up and connected to." They highlight that claim 1 describes numerous elements that are "aligned," including (1) "an applicator head having an applicator orifice and being aligned with said canal of said chamber"; (2) "a delivery aperture being associated and aligned with said applicator head"; and (3) "said cartridge aperture of said cartridge appointed to be aligned with said applicator orifice." ('445 Patent, Column 9, lines 26-27, 29-30, 30-32.) In each of these, the elements are "lined up and connected to" one another. According to defendants, this is also reflected in Figure 1a, where the total claimed delivery applicator is a single object, with each of its parts and elements connected to the next.

Although many "aligned" elements happen to also be "connected to" one another as defendants suggest, this is not always the case, and the term "aligned" does not require a connection. Further, the preferred embodiment provides an example of "aligned" elements that are not connected. Claim 1 requires "a delivery aperture being associated with and aligned with said applicator head." ('445 Patent, Column 9, lines 29-30.) In the example set forth in the specification, and as can be seen from Figures 1a and 1b, the delivery aperture 22 is on the end of prong 20 and spaced from the applicator head 18. However, the delivery aperture 22 is not connected to the applicator head 18, both of which are identified as "aligned" in claim 1. The Court therefore does not find that the term "aligned" requires a connection. *See Vitronics*, 90 F.3d at 1583 (interpretation that excludes preferred embodiment is "rarely, if ever, correct"). Here, the Court defines "aligned" to mean lined up or in line with regarding position or orientation.

f. "prong member" and "prongs"

The parties initially disputed the terms "prong member" and "prong(s)" separately. However during oral argument, they reached agreement that these terms are used interchangeably throughout the '445 Patent. (February 8, 2016 *Markman* Hearing Transcript at 69:5-14.) Accordingly, the Court addresses these terms as one. The disagreement is about the number of prongs/prong members. Plaintiffs assert that the claim requires only one, but permits multiple prongs, while Defendants argue that the Court should read the claim to require at least three prongs.

Plaintiffs primarily rely on *Baldwin Graphic Systems, Inc. v. Siebert, Inc.*, 512 F.3d 1338, 1343 (Fed. Cir. 2008), wherein the claim term "a pre-soaked fabric roll" was interpreted to mean "one or more pre-soaked fabric rolls." Later limitations in the claim referred back to "said fabric roll," and the Federal Circuit ruled that

[T]he use of a definite article ("said" or "the") to refer back to an initial indefinite article does not implicate, let alone mandate the singular. Because the initial indefinite article ("a") carries either a singular or plural meaning, any later reference to that same claim element merely reflects the same potential plurality. In grammatical terms, the instances of "said fabric roll" in the claim are anaphoric[³] phrases, referring to the initial antecedent phrase. Because the initial phrase carries no definitive numerosity, the anaphoric phrases do not alter that meaning in the slightest.

Id. Plaintiffs argue that, just as the use of "said fabric roll" in *Baldwin* did not mandate the singular, the use of "said prongs" in the present case does not mandate the plural; rather, "said prongs" reflects the same potential plurality of the phrase "at least one prong member." In the context of the claim language, plaintiffs assert that claim 1 requires only one prong, albeit also

³ The term "anaphoric" is defined as "being a word or phrase that takes its reference from another word or phrase and especially from a preceding word or phrase." *See* Merriam-Webster Online Dictionary (March 30, 2016), http://www.merriam-webster.com/dictionary/anaphoric.

recognizing that more than one prong could potentially be used. *See Versa Corp. v. Ag-Bag Int'l Ltd.*, 392 F.3d 1325, 1330 (Fed. Cir. 2004) ("in context, the plural can describe a universe ranging from one to some higher number, rather than requiring more than one item").

As to the substance of the definition, plaintiffs aver that either "prong" or "prong member" should be construed as "any projecting part attached to or constructed within the applicator head." Defendants ask the Court to construe "prong member" as "one of a series of at least three prongs" and to construe "prongs" as "at least three hollow and round tubes of small diameter protruding from the applicator head with an opening at the internal end to receive a solution and an opening at the external end to secrete a solution." Defendants assert that claim 1 makes clear in subsection c that the purpose of the prongs is to deliver the solution through the delivery aperture of the internal channel of the prong member. Further, the specification provides

[a]t least one prong member having an internal channel and prong/delivery aperture is constructed with the direct delivery applicator. The prong is constructed having an appropriate length so that the prong's delivery aperture substantially contacts the animal's skin beneath the fur. With this construction, the active ingredients are directly delivered onto the animal's skin

(D.E. 72, 73 ("Burnside Decl.") Ex. A at 2:59-65.) Defendants point to figures 1a, 1b, and 2a in the specification, all of which show at least four prong members and one of which shows six. They also allege that throughout the preferred embodiment section of the specification, the patent refers to multiple prongs. ('445 Patent, Column 4, lines 22-23, 34, 36-37, 41, 43, 65; Column 6, lines 52, 53, 55, 57-58, 62.) Finally, Hurwitz's own laboratory notebook, photographs, and drawings all emphasize that the core of the invention is the multitude of "teeth" or prongs that "help balance the dispersion of liquid creating different avenues of the liquid to travel and actually helping to direct the application . . . " (*Id.* at Column 97, lines 5-11.)

The first reference to some form of the term "prong" appears in claim 1, subsection c, which specifies that the direct delivery applicator has "at least one prong member." Thereafter, the claim references both the singular and the plural form of prong/prong member and refers back to the first instance by use of the word "said." The initial use of the term, "at least one prong member," contains the potential for singular and for plural. Thus, the fact that "said" is used to harken back to this first occurrence is not dispositive as to the number of prongs/prong members. Additionally, neither the specifications nor the prosecution history clarify the matter, as both contain both plural and singular uses of the term prong/prong member. (*Compare, e.g.*, D.E. 138-3, Ex. B at 12; D.E. 139-7, Ex. F at 11 (plural), *with* D.E. 138-3, Ex. B at 9; D.E. 139-7, Ex. F at 8 (singular).)

Having reviewed all of the evidence, the Court declines to assign a fixed number of prongs/prong members to the claim terms. It is most likely that the inventor intended exactly what the claim says: "at least one prong member," but ideally three or more. Although this is broad and covers a wide array of designs, the '445 Patent incorporates devices with one prong and those with multiple prongs that otherwise meet the claim language. Further, requiring three prongs or prong members is contrary to the doctrine of claim differentiation, which disfavors reading a limitation from a dependent claim into an independent claim. *Phillips*, 415 F.3d at 1315. Dependent claim 4 recites "A direct delivery applicator as recited by claim 1, comprising at least three prong members." ('445 Patent, Column 10, lines 1-2.) With defendants' proposed definition, dependent claim 4 adds no limitation to claim 1. Accordingly, the Court declines to adopt a numerical limitation and construes "prong" and "prong member" to be any projecting part attached to or constructed within the applicator head.

g. "delivery aperture"

Plaintiffs propose that "delivery aperture" be defined as "an opening, such as a hole, gap, or slit for delivery of something." Defendants assert that the term should be construed as "a small opening at the end of the multiple prongs and protruding from the chamber." Plaintiffs contend that the definition proposed by defendants includes limitations not present in the ordinary meaning of the term—i.e. that it be small, that it be at the end of multiple prongs, and that it protrude from the chamber. Defendants argue that it is clear from the claims and specification that the delivery aperture is the small opening at the ends of the applicator's prongs through which the solution exits the applicator.

Subsection c. of claim 1 describes each prong member as:

having an internal channel therein with a delivery aperture being associated and aligned with said applicator head, said cartridge aperture of said cartridge appointed to be aligned with said applicator orifice of said applicator head for delivery of said solution through said delivery aperture of said internal channel of said prong member onto said animal's coat.

('445 Patent, Column 9, lines 28-34.) The claim language provides the context to discern that a "delivery aperture" is an opening for delivery of something. Defendants' proposed construction reaches too far. First, the term "small" is relative and not indicated in the claim or specifications. Second, defendants' attempt to require that the invention have multiple prongs or prong members by including numerical requirement in an unrelated term's definition is misplaced given the discussion and Court's decision in the prior section and in the section on plaintiffs' request to amend or correct the patent. (*See supra* pp. 8-9, 16-18.) Accordingly, the Court adopts plaintiffs' proposed construction.

h. "flexible deformable material"

Plaintiffs argue that their proposed definition of "material that can be flexed" is consistent with the ordinary definition and that defendants' proposed definition of "rubber

having a thickness in the range of 1/32 inch to 3/32 inch" confuses claim requirements with definitions. Plaintiffs assert that the term "flexible deformable material" was not given a special definition in the specification, indicating that lexicography is not present here. *G.E. Lighting Solutions, LLC*, 750 F.3d at 1308-09. Accordingly, the term should be given its ordinary meaning. A material is deformed when it is bent, so any material capable of being flexed, a synonym for bent, is also capable of being deformed. Plaintiffs take issue with defendants' construction because it appears to rely on claim 1, subsection e, which, although an additional requirement or limitation, is not a definition of the term flexible deformable material.

Defendants assert that plaintiffs' definition is too broad, as it includes any material that can be flexed. Rather, Defendants argue that "flexible deformable material" is limited by claim 1 and is defined in subsection e, which sets forth: "said flexible deformable material being composed of rubber having a thickness in the range of 1/32 inch to 3/32 inch." ('445 Patent, Column 9, lines 41-43.) Because this claim language is clear and unambiguous, defendants assert that the Court's inquiry should end here. However, they offer further support by way of the prosecution history. In the initial patent application, there was no limitation in claim 1 on the material composing the chamber of the application base; the limitation of flexible deformable material and the limitation of rubber with a certain thickness were dependent claims. The USPTO rejected Hurwitz's application because it would be obvious in light of a prior use, stating:

The closest prior art or record, Dovergne alone or in combination with Robinson, does not disclose or suggest rubber as a flexible deformable material, only plastic. Dovergne also does not disclose or suggest any thickness measurement for the chamber. Robinson discloses a thickness measurement but does not disclose rubber as a material and actually teaches away from the rubber by disclosing a rigid plastic handle. Therefore, it would not be obvious to first modify the device of Dovergne such that the chamber of the

applicator base is made of rubber and then modify the resulting device such that the thickness is specifically within the claimed range.

(D.E. 116-1 ("Slocum Decl.") Ex. C at 55.) Hurwitz then incorporated dependent claims 3 and 4 into independent claim 1 to overcome the rejection. (D.E. 70 at 23-24.) Specifically, the remarks included in Hurwitz's amended application provided that, "applicant has amended claim 1 to require (i) that the chamber of the applicator base is composed of a flexible deformable material . . . and (ii) the flexible deformable material is composed of rubber having a thickness in the range of 1/32 inch to 3/32 inch." (Burnside Decl. Ex. B at 37-38; D.E. 70 at 24.) Defendants argue that this history indicates that plaintiffs limited the composition of the applicator's chamber in response to rejection from the Examiner and thereby disclaimed any scope of flexible deformable material other than a rubber having a thickness in the range of 1/32 inch to 3/32 inch.

The Court looks first to the claim language itself and other internal evidence. *Vitronics*, 90 F.3d at 1582. Claim 1, subsection d states "said chamber of said applicator base being composed of a flexible deformable material so that said chamber can be squeezed to apply enhanced pressure on said solution compartment of said cartridge to facilitate release of said solution from said cartridge through said prongs." The term "flexible deformable material" is not defined, but the context of the claim reinforces that the composition of the chamber is malleable to permit application of pressure and squeezing. The Court is persuaded by the prosecution history that the only way in which Hurwitz was granted the '445 Patent is by specifying rubber of a certain thickness to differentiate the material from plastic; however, subsection e of claim 1 already holds plaintiffs to this requirement. To incorporate essentially the entire text of subsection e—"said flexible deformable material being composed of rubber having a thickness in the range of 1/32 inch to 3/32 inch"—into the definition of "flexible

deformable material" would be to eviscerate the need for subsection e. *See Phillips*, 415 F.3d at 1314; *Safety Rail Source*, 656 F. Supp.2d at 479-80; *JVI, Inc.*, 2012 WL 6708169 at *15. Thus, the Court construes "flexible deformable material" to mean rubber that is malleable and capable of being squeezed.

i. "rubber"

As discussed in the previous section, subsection e of claim 1 provides: "said flexible deformable material being composed of rubber having a thickness in the range of 1/32 inch to 3/32 inch." Plaintiffs argue that the term "rubber" does not have a specialized meaning to one of ordinary skill in the art and must therefore be given its ordinary meaning. They propose the term be construed as "material, natural and/or synthetic, capable of being flexed." Defendants propose that "rubber" be defined as "a non-rigid, non-plastic material, made either from the sap of rubber trees or synthetically to mimic same, with a pronounced and intended degree of flexibility."

Plaintiffs take issue with defendants' addition of the terms "non-rigid," "non-plastic," mimic," and "intended degree of flexibility" because they are vague and would likely confuse a jury. Defendants argue that plaintiffs' definition of "rubber" is overly broad because it would include any material capable of being flexed. This could include plywood, poster board, a credit card, a fencer's sword, etc. However, the fact that claim 1 requires an ultra-thin rubber indicates that the definition or rubber should include a pronounced degree of flexibility. Defendants also assert that any definition of "rubber" must contain the concepts of "non-plastic" and "non-rigid" because that is what the USPTO required in allowing the claim, as evidenced by the prosecution history. Indeed, the USPTO's explicit rationale for the initial rejection was that one of the prior art references (Robinson) taught the use of rigid plastics. Accordingly, if the patent material

could be a rigid plastic, then it would have been obvious in light of the Robinson reference and a patent would not have been granted.

Both parties agree that rubber can be made from natural or synthetic materials or some combination thereof. Both parties also agree that rubber is capable of being flexed. Beyond that, the Court parts ways with both proposed constructions. In the context of the claim and other intrinsic evidence, plaintiffs' construction is too broad and could include any flexible material, and defendants' construction is too limiting. To incorporate the best of both positions and the areas of agreement indicated at oral argument, the Court combines the proposed definitions as follows: an elastic polymer capable of being flexed, natural and/or synthetically made.

j. "polymeric material" (dependent claim 16)

The final term for construction, "polymeric material," is found in claim 16, which recites "[a] direct delivery applicator as recited by claim 1 being composed of a light weight polymeric material." Plaintiffs argue that the Court should adopt their proposed definition of "essentially, of, relating to, or consisting of a polymer" because defendants have not provided a counter construction and because plaintiffs' definition is accurate. They cite to the opinion of their expert that "[p]olymeric materials are materials made up of polymers which are large, chainlike molecules consisting of numerous, smaller, repeating units, and include plastics, thermosetting plastics such as vulcanized rubber, and other natural or synthetic materials." (D.E. 83-2 ("Iezzi Decl.") ¶ 13.) Plaintiffs also cite the Gale Encyclopedia of Science, which states that

[p]olymers are made up of extremely large, chainlike molecules consisting of numerous, smaller, repeating units called monomers. Polymer chains, which could be compared to paper clips linked together to make a long strand, appear in varying lengths. . . . addition polymers include polyethylene, polyprophylene, Teflon, Lucite, and rubber, etc. . . . It was about 1930 when scientists first began to understand and accept the evidence that polymers were giant, chain-like molecules that were flexible. . . . Natural and

synthetic rubbers are both addition polymers. . . . Plastics – A group of natural or synthetic polymers.

(*Id.*, Ex. 1 ¶ 1.)

Defendants take the position that the term "polymeric material" is indefinite and have not proposed a construction. *See Nautilus, Inc. v. Biosig Instruments, Inc.*, 134 S. Ct. 2120, 2124 (2014) ("[A] patent is invalid for indefiniteness if its claims, read in light of the specification delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention."). Defendants claim that plaintiffs' expert offers no help, as he ambiguously states that the term includes (but apparently is not limited to) numerous materials such as plastic, vulcanized rubber, natural materials, synthetic materials and even liquids. Defendants assert that this makes the claim "utterly obvious in light of the prior art which plaintiffs navigated around when they amended claim 1" as has previously been discussed. Because a patentee cannot seek to broaden the coverage of a dependent claim beyond the coverage of its independent claim, claim 16 must incorporate the limiting elements of claim 1, including the requirement that said chamber of said applicator base is composed of a flexible deformable material and that said flexible deformable material is composed of rubber having a thickness in the range of 1/32 inch to 3/32 inch.

At oral argument and in their papers, defendants reserved the right to argue this issue at a later date, and although they address it briefly in their responsive *Markman* brief, neither side has properly aired or briefed the issue. In the absence of an alternate proposed definition by defendants, the Court adopts plaintiffs' proposed definition, which is accurate in light of the claim language, albeit broad, and may revisit the issue if it is appropriately raised.

V. Conclusion

For the foregoing reasons, the Court denies the motion to amend or correct the patent and adopt the various constructions of the disputed terms as set forth above. An appropriate order will follow.

s/ Katharine S. Hayden

Watharina S. Hayden J. S. F.

Katharine S. Hayden, U.S.D.J.